

**STATEMENT OF BASIS
GENERAL PERMIT FOR
CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITIES (CAAPF)
PERMIT NUMBER UTG130000
RENEWAL/MINOR INDUSTRIAL**

The State of Utah, in compliance with the *Utah Water Quality Act, Title 19 Chapter 5, Utah Code Annotated*, 1953 as amended, the "Act", may issue a general permit for CAAPF.

APPROPRIATENESS OF THE GENERAL PERMIT: Utah Administrative Code (UAC) *R317-8-2.5* authorizes the issuance of general permits to categories of point sources within the same geographical area, which involve similar types of operations, discharge the same type of wastes, and require similar effluent limitations and pollution control measures. This general permit renewal will continue coverage when the present general permit expires.

CRITERIA FOR COVERAGE UNDER THE GENERAL PERMIT FOR CAAPF: This general permit shall apply only to the discharge of wastewater from CAAPF as defined in *UAC R317-8-3.7*. This includes facilities for both cold and warm water aquatic animals. See appendix A for the text of *UAC R317-8-3.7*.

NOTICE OF INTENT (NOI) TO APPLY FOR COVERAGE UNDER THE GENERAL PERMIT FOR CAAPF: Any facility, including those which presently have an individual Utah Pollutant Discharge Elimination System (UPDES) permit, which desires coverage under the general permit for a CAAPF and meets the requirements above, can receive coverage following submission and affirmative evaluation of an NOI.

This NOI is essentially an application and can be obtained from:

Department of Environmental Quality
Division of Water Quality
288 North 1460 West
PO Box 144870
Salt Lake City, Utah 84114-4870
(801) 538-6146

The Executive Secretary may require additional information or clarification of information submitted in the NOI

The NOI to obtain coverage under this general permit for a CAAPF shall be submitted at least 180 days before the discharge permit is needed. For all facilities desiring to continue coverage under the general permit, the desire to continue coverage must be submitted 180 days prior to the expiration of the current permit. Those desiring to maintain coverage need not submit another NOI, but only a statement of their desire to continue coverage 180 days prior to the expiration date of their current permit.

The Executive Secretary should be able to respond to submission of the NOI within 30 days for a UPDES new source or discharger and 60 days for an existing source by notifying the applicant whether more information is needed or if the NOI is complete. If the application is complete and the applicant meets all the requirements for coverage, coverage under the General Permit may be issued.

The permittee shall give notice to the Executive Secretary within 30 days of any planned physical alterations or additions to the production infrastructure of the permitted facility. This notification will consist of resubmitting the Notice of Intent located on page 5 of the General Permit For Concentrated Aquatic Animal Production Facilities (UTG130000). In addition, if there are any planned substantial changes to the permittee's existing sludge facilities or their manner of operation or to current sludge management practices of storage and disposal, the permittee shall give notice to the Executive Secretary of any planned changes at least 30 days prior to their implementation.

Any permittee issued coverage under this general UPDES permit may request to be excluded from coverage under this general permit by applying for an individual permit. If an individual permit is issued the applicability of this general permit is automatically terminated on the effective date of the individual permit. In addition, the Executive Secretary may require any permittee covered by the general permit to apply for and obtain an individual UPDES permit. Cases where an individual permit may be required include those listed in *UAC R317-8-2.5(2)(b)1*.

DESCRIPTION OF DISCHARGE: These general permits will cover discharges of treated wastewater from CAAPF.

BEST MANAGEMENT PRACTICES:

On June 30, 2004, EPA's Acting Deputy Administrator signed a final rule to establish wastewater controls for concentrated aquatic animal production facilities. These will help reduce discharges of conventional pollutants (mainly Total Suspended Solids), non-conventional pollutants (such as nutrients, drugs and chemicals) and, to a lesser extent, toxic pollutants (metals and PCBs).

The final rule applies to direct discharges of wastewater from these existing and new facilities:

- Facilities that produce at least 100,000 pounds a year in flow-through and recirculating systems that discharge wastewater at least 30 days a year (used primarily to raise trout, salmon, hybrid striped bass and tilapia).
- Facilities that produce at least 100,000 pounds a year in net pens or submerged cage systems (used primarily to raise salmon).

Facilities that produce more than 45,454 harvest weight kilograms (approximately 100,000 lbs) will be required to develop and certify a Best Management Plan that includes and describes how the facility will meet the following requirements;

- a. Prevention of the discharge of drugs and pesticides that have been spilled and minimize discharges of excess feed.
- b. Minimizing the discharge of solids such as uneaten feed, settled solids and animal carcasses.
- c. Maintenance of production and wastewater treatment systems.
- d. Keep records on numbers and weights of animals, amounts of feed, and frequency of cleaning, inspections, maintenance, and repairs.

- e. Staff training to prevent and respond to spills and to properly operate and maintain production and wastewater treatment systems.
- f. Reporting the use of experimental animal drugs or drugs that are not used in accordance with label requirements.
- g. Reporting failure of or damage to a containment system.

SUBSTANTIVE CHANGES FROM THE PREVIOUS PERMIT: Changes from the previous permit include the inclusion of best management practices and the requirement to develop a best management plan.

BASIS FOR DISCHARGE LIMITATIONS: Total suspended solids (TSS) limits contained in this renewal permit are based on *R317-1-3.2 A and B*.

The potential for TSS is created by unconsumed fish food and deposition of fish feces. Most of this TSS generated is treated by settling pond(s) at the end of the CAAPF. The TSS limitation will be the same as that required in the previous permit (25 mg/L daily maximum).

Reported TSS can be a “**net value**” if the facility water source contributes to and/or causes a violation of effluent limits. If the permittee chooses to report a “**net value**” for TSS, it must monitor the source water as well as the effluent by grab sample.

Based on *R317-1-3.2D*, pH shall be limited to a range of 6.5 to 9.0.

The Colorado River Basin Salinity Forum on October 28, 1988 proposed a "Policy for Implementation of the Colorado River Salinity Standards through the NPDES Permit Program for Fish Hatcheries." This policy will apply to only those hatcheries within the Colorado River Basin above Imperial Dam. Over the last five years the CAAPF within the Colorado River Basin have demonstrated that they do not have a net TDS increase of 100 mg/L or greater. However, this policy requires monitoring of the salinity (TDS) at the time of peak fish population. Since the salinity requirements have reliably been met, it will be required by this permit to monitor TDS on the source water and effluent only once per year at the time of greatest fish population. If any of the CAAPF exceed 100 mg/L increase, they shall immediately resample. If the resample shows a net increase greater than 100 mg/L, the permittee may submit a request for a waiver of the TDS requirements to the Executive Secretary. If this waiver request is denied, the permittee may be required to obtain an individual permit. The general permit will remain in effect until an individual permit is issued. If the resample indicates a net increase of less than 100 mg/L, the permittee shall continue monitoring TDS on a yearly basis during the time of greatest fish population.

Total and fecal coliform limitations are not included in this permit because no sanitary wastes are allowed to be discharged into hatchery effluents. In addition, in a letter sent from the State by Calvin Sudweeks to Bob Burm of EPA dated November 2, 1979 it was indicated that it was not necessary to include fecal and total coliform in CAAPF permits. EPA agreed and since that time none have been incorporated into any CAAPF permits.

Ammonia nitrogen was not included in this renewal of the general permit because it is felt that toxicity due to ammonia is not a problem at any of the CAAPF. It is felt that the CAAPF act as a large biomonitoring unit, which will indicate the presence of toxicity if any is present.

Nutrient limits in the form of total phosphorous (T-PO₄) shall be limited and incorporated into individual CAAPF permits as required by the TMDL process and approved by the Executive Secretary.

There shall be no discharge of floating solids or visible foam in other than trace amounts. Rearing of fish within settling ponds and/or waste treatment ponds is not permitted. There shall be no discharge of sanitary wastes or process water from fish processing operations and only commercially processed fish foods shall be used (no unprocessed offal or other animal byproducts). At least one regular effluent sample per year shall be taken during raceway cleaning.

The following table is a summary of the above discussed effluent limits:

<u>Parameter</u>	<u>Daily Min.</u>	<u>Daily Max.</u>
TSS mg/L	NA	25
pH s.u.	6.5	9.0
TDS mg/L(a)	NA	NA
Flow	NA	NA

(a) Applicable only if in the Colorado River Basin drainage. TDS shall be less than 100 mg/L increase through the facility.

MONITORING REQUIREMENTS: TSS shall be sampled monthly by a grab sample and pH is to be sampled monthly by grab sample. Quarterly monitoring does not provide adequate data by which to judge compliance of the discharge water quality. Hence the need for monthly monitoring at a minimum. The CAAPF source water(s) and effluent(s) TDS shall be monitored on a yearly basis with a grab sample during the time of maximum fish population. Flow in million gallons per day (MGD) shall be monitored monthly. The following table summarizes the monitoring requirements.

Table 1. Effluent Limitations and Monitoring Requirements <u>a/</u>			
	Effluent Limitations	Monitoring Requirements	
	Daily Maximum	Measurement Frequency	Sample Type
Flow, MGD	N/A	Continuous	Measured
pH	<u>b/</u>	Monthly	Instantaneous
Total Suspended Solids, mg/L	25	Monthly	Grab
Total Dissolved Solids (TDS) mg/L	<u>c/</u>	Yearly	<u>c/</u>

a/ See Definitions, *Part I.A* for definition of terms.

b/ The pH shall not be less than 6.5 standard units nor greater than 9.0 standard units in any sample and shall be monitored monthly by a grab sample.

- c/ Total Dissolved Solids (TDS) limitations will only be applicable to those discharges from fish hatcheries within the Colorado River Basin. For these hatcheries TDS shall be monitored in the water source as well as the effluent by grab sample. The yearly sample shall be taken at the time of year during which the fish population is greatest, as indicated in the NOI. If any of the hatcheries exceed a 100 mg/L net increase the permittee shall immediately resample. If the second sample shows a net increase greater than 100 mg/L, the permittee may submit a request for a waiver of the TDS requirements, to the Executive Secretary. If this waiver is denied the permittee will be requested to obtain an individual permit. The general permit will remain in effect until an individual permit is issued. If the resample indicates a net increase of TDS less than 100 mg/L, the permittee shall continue to monitor TDS on a yearly basis during the time of greatest fish population.

Additional monitoring shall be required for facilities that discharge into waters or watersheds on the 303d list of impaired waters. These facilities shall be required to monitor for the pollutant(s) that cause the impairment for these waters. The exception to this will be bacteriological pollutants such as *E. coil*, fecal and total coliforms, since hatcheries do not contribute these pollutants to the water body. The Division of Water Quality will incorporate for monitoring purposes only, any additional sampling data for parameters of concern.

Results of all analyses shall be summarized and reported monthly using standard discharge monitoring report (DMR) forms (federal form 3320-1).

PERMIT DURATION: This general permit shall expire February 28, 2015.

Permit drafted by Lonnie Shull, State of Utah, Division of Water Quality in January, 2010.

APPENDIX A

R-317-8-3.7 CONCENTRATED AQUATIC ANIMAL PRODUCTION FACILITIES

(1) Permit required. Concentrated aquatic animal production facilities, as defined in this section, are point sources subject to the UPDES permit program.

(2) Definitions. "Concentrated aquatic animal production facility" means a hatchery, fish farm, or other facility which meets the criteria in R317-8-3.7(5) or which the Executive Secretary designates under R317-8- 3.7(3).

(3) Case-by-Case designation of concentrated aquatic animal production facilities.

(a) The Executive Secretary may designate any warm or cold water aquatic animal production facility as a concentrated aquatic animal production facility upon determining that it is a significant contributor of pollution to the waters of the State. In making this designation the Executive Secretary will consider the following factors:

1. The location and quality of the receiving waters of the State;
2. The holding, feeding, and production capacities of the facility;
3. The quantity and nature of the pollutants reaching waters of the State; and
4. Other relevant factors.

(b) A permit application will not be required from a concentrated aquatic animal production facility designated under this section until the Executive Secretary or authorized representative has conducted an on-site inspection of the facility and has determined that the facility could and should be regulated under the UPDES permit program.

(4) Information required. New and existing concentrated aquatic animal production facilities shall provide the following information to the Executive Secretary using the application form provided:

- (a) The maximum daily and average monthly flow from each outfall.
- (b) The number of ponds, raceways, and similar structures.
- (c) The name of the receiving water and the source of intake water.
- (d) For each species of aquatic animals, the total yearly and maximum harvestable weight.
- (e) The calendar month of maximum feeding and the total mass of food fed during that month.

(5) Criteria for determining a concentrated aquatic animal production facility. A hatchery, fish farm, or other facility is a concentrated aquatic animal production facility for purposes of this regulation if it contains, grows, or holds aquatic animals in either of the following categories:

(a) Cold water aquatic animals. Cold water fish species or other cold water aquatic animals in ponds, raceways, or other similar structures which discharge at least thirty (30) days per year but does not include:

1. Facilities which produce less than 9,090 harvest weight kilograms (approximately 20,000 pounds) of aquatic animals per year; and
2. Facilities which feed less than 2,272 kilograms (approximately 5,000 pounds) of food during the calendar month of maximum feeding.
3. Cold water aquatic animals include, but are not limited to the Salmonidae family of fish.

(b) Warm water aquatic animals. Warm water fish species or other warm water aquatic animals in ponds, raceways, or other similar structures which discharge at least thirty (30) days per year, but does not include:

1. Closed ponds which discharge only during periods of excess runoff; or
2. Facilities which produce less than 45,454 harvest weight kilograms (approximately 100,000) pounds) of aquatic animals per year.
3. "Warm water aquatic animals" include, but are not limited to, the Ameiuride, Centrachidae and Cyprinidae families of fish.